

What is claimed is:

1. An anti-loosening bolt assembly comprising:

a setscrew having an external screw on its outer periphery;

a lock bolt having an external screw with the same pitch as the screw of
5 the setscrew, and an axial end of which is engaged with an axial base of the
setscrew;

wherein either said axial base of the setscrew or said axial end of the lock
bolt has a conical protrusion part;

the other has a first concave part, with which said protrusion part is en-
10 gaged; and

an outer peripheral surface of said protrusion part and an inner peripheral
surface of a first concave part are slightly eccentric.

2. An anti-loosening bolt assembly as set forth in claim 1, wherein either said
protrusion part or said first concave part is eccentric to the external screws;
15 and the other is concentric thereto.

3. An anti-loosening bolt assembly as set forth in claim 1, wherein the set-
screw has a engaging part with which a rotary tool engages.

4. An anti-loosening bolt assembly as set forth in claim 3, wherein said en-
gaging part is a second concave part opened on either an axial end surface or
20 the base surface.

5. An anti-loosening bolt assembly as set forth in claim 4, wherein the first
concave part is located at the axial base of the setscrew, and said second con-
cave part is located at axial inner recess of the first concave part.

6. An anti-loosening bolt assembly as set forth in claim 1, wherein the lock
25 bolt has a third concave part, with which a rotary tool engages, opened on the
base surface.

7. An anti-loosening bolt assembly as set forth in claim 1, wherein a diameter

of the external screw is a maximum diameter of the setscrew.

8. An anti-loosening bolt assembly as set forth in claim 1, wherein a diameter of the external screw is a maximum diameter of the lock bolt.

9. An anti-loosening bolt assembly as set forth in claim 1, wherein a ratio of
5 the maximum diameter of the protrusion part to the maximum diameter of the external screw is between 0.5 to 0.6.

10. An anti-loosening bolt assembly comprising:

a setscrew screwed into a screw bore;

a lock member inserted into the screw bore nearer to the recess than the
10 setscrew;

wherein a concave part is formed in either a top surface of said lock member or a lower end surface of the setscrew;

a protrusion part fitted into the concave part is formed on the another surface; and

15 a peripheral surface of said protrusion part and inside surface of a first concave part is slightly eccentric.